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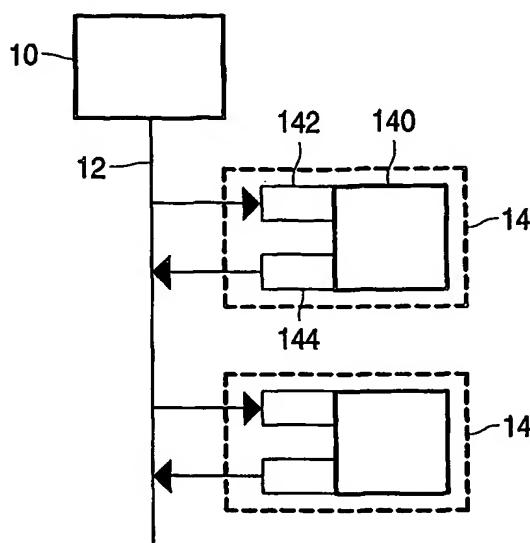
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(54) Title: DATA PROCESSING APPARATUS THAT USES COMPRESSION FOR DATA STORED IN MEMORY



(57) Abstract: Data, such as an image, is made up of data-items (pixels) that are each associated with a respective data address. Compressed blocks representing the data are stored in a memory system. Each block representing compressed data-items associated with data addresses in a respective sub-range of addresses of the data. Each block starts from a respective preferred starting address for multi address transfer. The sub-range of addresses of each block has a length corresponding to an address distance between the preferred starting address, leaving memory addresses not occupied by the particular block in between blocks due to compression. A decompressor is coupled between a processing element and the memory system. The decompressor starts a multi address memory transfer of a required one of the blocks from the memory system dynamically when the processing element requires access to the block, leaving memory addresses directly following the block up to a preferred starting address for a next one of the blocks untransferred in the transfer. The transferred data is decompressed and passed to the processor.